## 1999 NATIONAL HIV PREVENTION CONFERENCE

## **Abstract 409**

**TITLE:** An HIV-Risk Behavioral Typology of Street-Based Injecting Drug Users (NADR Data) **AUTHORS:** Doshi, NJ (University of Tennessee College of Medicine-Chattanooga Unit)

**BACKGROUND/OBJECTIVES:** Injection drug use is implicated in the transmission of HIV through the sharing of contaminated injection equipment, and through disinhibiting sexual practices, both of which vary with the type of drugs used. This research investigated the question of whether a national sample of street-based injecting drug users (IDUs) follow distinct drug use, needle use, and sexual behaviors, to allow for their classification into a comprehensive HIV-risk behavior typology. The derived types were further studied for their demographic profile, and background characteristics, to provide a better understanding of and to validate the developed typology.

**METHODS:** The National AIDS Demonstration Research Project (NADR, 1987-1992)) data on IDUs contacted through street outreach were used in this study (n = 2,929). The NADR data was partitioned into two samples based on the birth month of the subjects, and statistical tests (Mann-Whitney U test, and descriptive statistics) were performed to ensure that the derived samples were not significantly different from each other. Fifteen variables on the type and form of drug(s) used, 3 variables on needle-use behavior, and 7 variables on number and type of sexual partners, as well as type of sex and condom use, were used to develop the typology using two clustering methods (the Ward & Hook method, and the iterative Kmeans method), over the two data samples. The derived typology was then validated using 15 external variables using Chisquare analyses for nominal variables, and ANOVA with Scheffe's post-hoc comparison test for multiple groups for continuous variables.

**RESULTS**: A concordant solution of 6 distinct IDU types evolved over the two clustering techniques, as well as the two data samples. The six-group typology consisted of: 1) three male types including one homosexual/bisexual type, and two heterosexual types, 2) two female types, and 3) one male and female low sexual activity type. Of all the variables used for typology development, the types of drugs used in injected and noninjected form, and sexual practices followed, were the most beneficial in grouping IDUs. Behaviors common to all types and of great concern include polydrug use, use of dirty/used needles, sharing of cooker/cotton/rinse water, and lack of or inconsistent condom use. All of the 15 external variables showed up to be statistically significant, but only 9 of them were meaningfully different across types, including race, region, employment, income, residence, participation in drugtreatment programs, reported STD, travel and risk behaviors, and number of weeks spent in jail for the last 5 years.

**CONCLUSIONS**: The results of this study suggest that there are common threads of behavior which connect all IDUs no matter what 'type' they fall into, but there are also behavioral differences between IDU types depending upon their depth of involvement with the drug culture. Consideration of these behavioral patterns may be useful in the planning of more effective HIV prevention programs in the future.

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